

Work Order ID 68396

Tuesday, April 12, 2011 3:35:21 PM



PRELIMINARY ISSUE

Page 1

Item ID: D4364-043

Accept



Setup Start



Revision ID: PRELIM

Item Name: Aft Wearplate Assembly

Stop



Start Date: 4/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/15/2011 Req'd Qty: 1.00



Customer:



Reference:

Approvals:

Process Plan: H

Date: 4-11-12

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4364	PA1

100 0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg (D4364-3)

Dwg Rev: QA

Prog Rev: PA1

2-Deburr if necessary

B11-4-19

①

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B11-4-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Cust Item ID:

Required Date: 4/15/2011 Req'd Qty: 1.00



Customer:

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00 - inspect to PA



QC

Memo

0.00 Day only

Quality Control

0.00 Sub 4/20 PD

130

Form as per dwg

0.00



Brake NC

Memo

0.00

Brake NC

SB 11/12/20

140

QC5- Inspect part completeness to step on W/O

0.00 - inspect to PA



QC

Memo

0.00

Quality Control

Day only

Sub 4/20

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Page 3

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Start Date:	4/12/2011	Start Qty:	1.00			
Required Date:	4/15/2011	Req'd Qty:	1.00			
Reference:						
				Cust Item ID:		
				Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 		0.00							
Large Fab	Memo	0.00							
Large Fab	1- on D4365-3, fill cut outs with hardcoat welding rod as per dwg D4364 **DT9756** 2059 B Hardcoat Welding Rod BATCH#: <u>M117232</u>								
	2-weld D4365-3 to wearplate by positioning holes together as per dwg D4364 304 S.S. Welding Rod BATCH #: <u>M107057</u>								
	3-Transfer drill holes in bar								
160 	QC9- Inspect visual per QS1004- Fusion Welds	0.00							
QC	Memo	0.00							
Quality Control									

11-5-12 (X1)

11-06-13

POSITIVE RECALL
EFFECTIVE 11-04-13 AUTH U
RELEASED _____ DATE _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Work Order ID 68396

Tuesday, April 12, 2011 3:35:21 PM



Page 4

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Revision ID:	PRELIM				Stop	
Item Name:	Aft Wearplate Assembly					
Start Date:	4/12/2011	Start Qty:	1.00			
Required Date:	4/15/2011	Req'd Qty:	1.00			
Reference:				Cust Item ID:		
				Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00							
180 	Small Fab	0.00							
Small Fab	Memo	0.00							
	1- After finish, coat entire top (concave) surface as per note 10 on sheet 2 dwg D4364								
	can't inside surface w/ Plus 1 Back guard								
190 	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00							

2T 11-06-13

13 Jun 11

11 06 13 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____






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NOTE: Date & initial all entries



Work Order ID 68396

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Tuesday, April 12, 2011 3:35:21 PM

Item ID: D4364-043 Accept  Setup Start 
Revision ID: PRELIM
Item Name: Aft Wearplate Assembly Stop 
Start Date: 4/12/2011 Start Qty: 1.00  Cust Item ID:
Required Date: 4/15/2011 Req'd Qty: 1.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 	Identify as per dwg & Stock Location: _____	0.00							
Packaging	Memo	0.00							
Packaging									
210 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

RD2382.
ME
11-06-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 12, 2011 3:35:27 PM

Work Order ID: 68396

Parent Item: D4364-043

Parent Item Name: Aft Wearplate Assembly

Start Date: 4/12/2011

Required Date: 4/15/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.04.11 NEW ISSUE DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S18GA

Purchased

No

100

sf

204.0000

1.8

1.894737



304/316 .050 Sheet



1311-4-19

Location

Loc Qty

Loc Code

MAT020

204

111743

1

112178

4

113062

18

116135

48

116604

37

116979

96

116135

D4365-3

Manufactured

No

150

Each

0.0000

1



Bar

11-5-12.
68396

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 68396
Description: ACT WEAR PLATE ASSEMBLY		Part Number: D4364-043
Inspection Dwg: D4364-3, Rev: 8M		Page 1 of 1

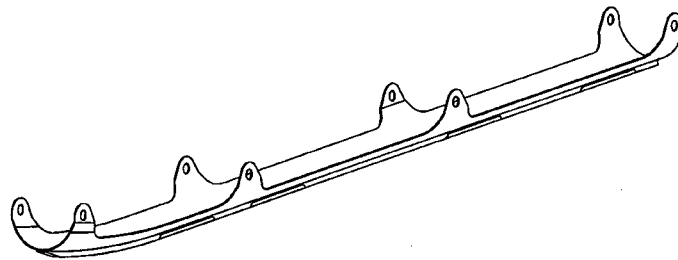
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

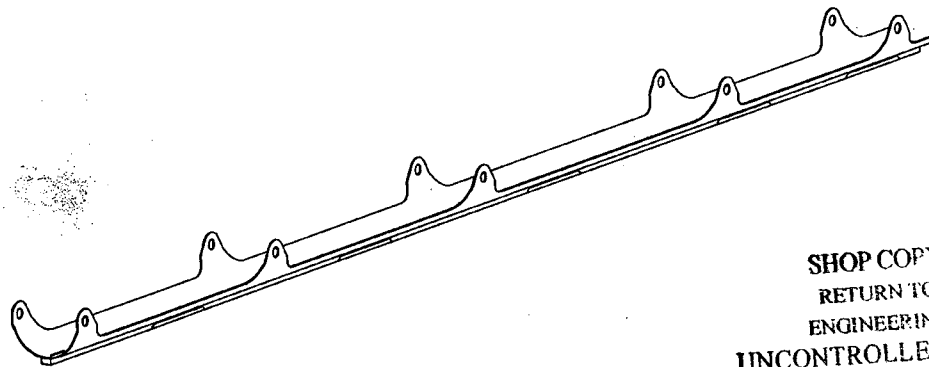
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.400	$\pm .010$	1.404	✓		V BOZ	
.875	$\pm .010$.875	✓		V	
.125	$\pm .010$.128	✓		V	
5.325	$\pm .010$	5.319	✓		V	
φ .188	+ .005 - .001	.191	✓		V	
3.00	$\pm .030$	3.037	✓		V	
.75	$\pm .030$.75	✓		V	
3.60	$\pm .030$	3.600	✓		V	
3.50	$\pm .030$	3.50	✓		V	
12.625	$\pm .010$	12.625	✓		T BOZ	
30.575	$\pm .010$	30.575	✓		T	
46.025	$\pm .010$	46.025	✓		T	
60.234	$\pm .010$	60.234	✓		T	
64.39	$\pm .030$	64.39	✓		T	
4.00	$\pm .030$	3.996	✓		V	
9.00	$\pm .030$	9.00	✓		T	
40.144	$\pm .010$	40.144	✓		T	
.050	$\pm .010$.047	✓		V	

Measured by: RB	Audited by: S	Prototype Approval:
Date: 11-4-19	Date: 11/04/20	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



D4364-041 FWD WEARPLATE ASSY



D4364-043 AFT WEARPLATE ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 48396

211-04-12

ITEM	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
	X		D4364-041	FWD WEARPLATE ASSY
		X	D4364-043	AFT WEARPLATE ASSY
1	1		D4364-1	PLATE
2		1	D4364-3	PLATE
3	1		D4365-1	BAR
4		1	D4365-3	BAR
5	A/R	A/R	2059B	HARDCOAT
6	A/R	A/R	ROCKGUARD 4714	SEALANT

**PRELIMINARY
ISSUE**

PA1	NEW ISSUE	SC	11.03.24
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. PA1
MFG. APPR.	<i>[Signature]</i>	D4364	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
DATE	11.03.24	<small>COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS RELEASED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
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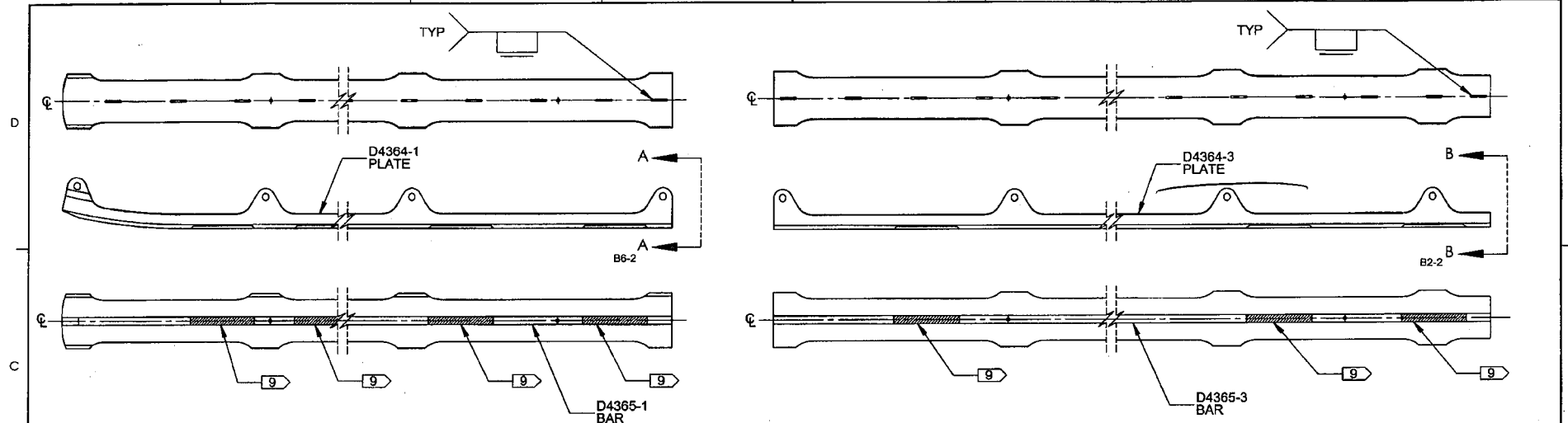
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

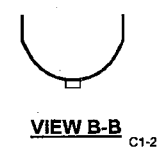
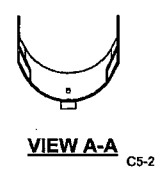
NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



D4364-041 FWD WEARPLATE ASSY

D4364-043 AFT WEARPLATE ASSY



u/o 68394

**PRELIMINARY
ISSUE**

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4364-04X" PER QSI 044 6.1
- 7) WEIGHT: D4364-041 = 4.18 lbs; D4364-043 = 6.07 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.19 THICK X 0.50 WIDE, FLUSH WITH D4365-X BAR ON ALL 3 SURFACES
- 10) AFTER FINISH, COAT ENTIRE TOP (CONCAVE) SURFACE WITH A LAYER OF SIKAFLEX-241/-291 OR PROSEAL 890 OR PROSEAL 1422 OR MIL-S-8802 CLASS B SEALANT OR PLUS ONE ROCKGUARD 4714, 0.020-0.040 THICK

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. PA1
MFG. APPR.		D4364	SHEET 2 OF 5
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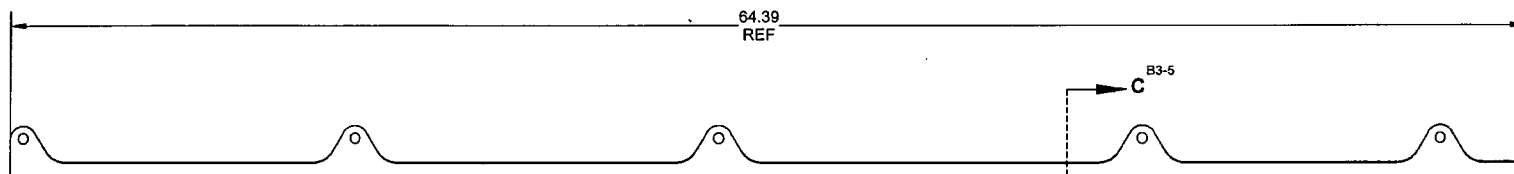
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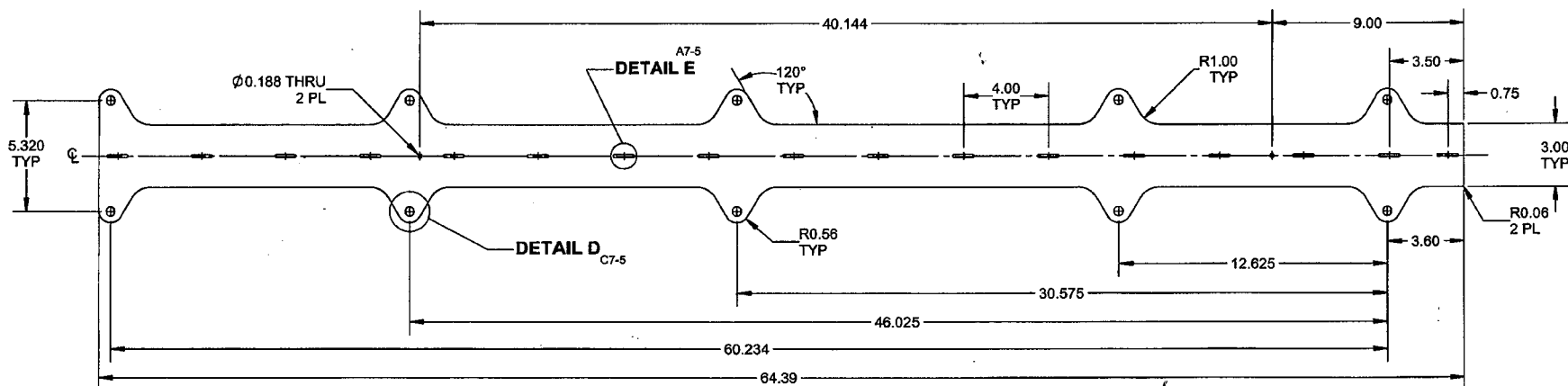
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D4364-3 PLATE
(MAKE FROM D4364-3F)



D4364-3F PLATE

u/o 68396

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240 18 GAUGE (0.050 THICK), REF. DART SPEC. M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 3.10 lbs

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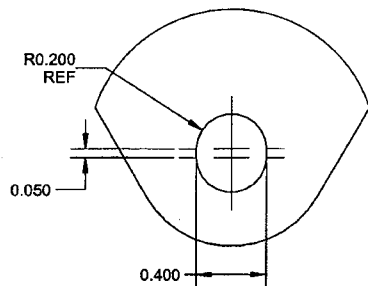
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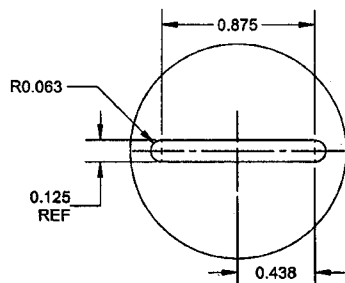
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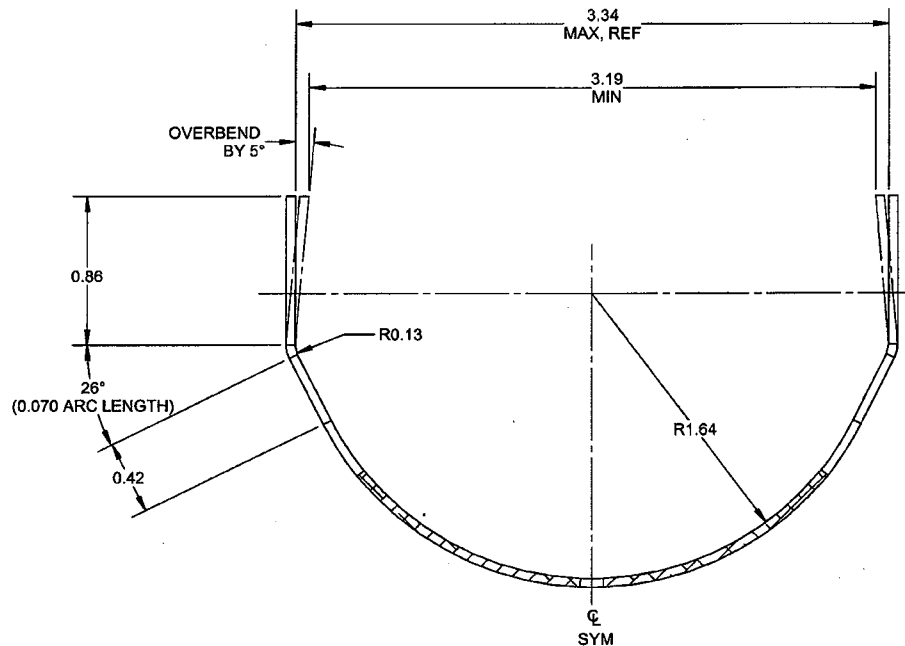
NOTE: Date & initial all entries



DETAIL D
SLOT DETAIL TYP
B5-3
B5-4



DETAIL E
SLOT DETAIL TYP
C5-3
C5-4



SECTION C-C

D3-3
D3-4

**PRELIMINARY
ISSUE**

w/o 68394

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